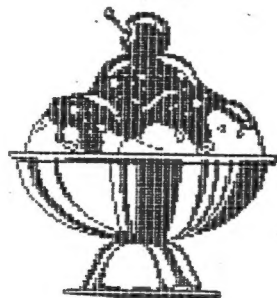


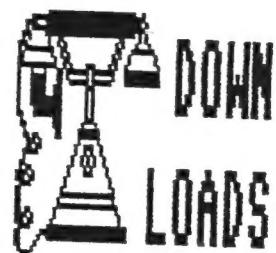
LISTing Newsletter

**Newsletter of the Long Island Sinclair/Timex Users Group
(Incorporating N.Y.T.S.E.)**



MAY 1993
Issue

**Next Meeting
May 16, 1993**

[illegible]

Listing Policy

Annual Dues...\$ 16.00

One "sample" copy sent upon receipt of a large SASE.
Copies provided on EXCHANGE BASIS with other bona fide user groups.
LISTing is published monthly except July and August by LIST (Long
Island Sinclair Timex) Group, a non profit user group.

We are always looking for articles, programs, reviews, etc. to keep our members informed and entertained. You maintain full copyright.

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 ++++++
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 V.P. BOB GILDER
 TRES. ROBERT MALLOY
 COR.SEC. JOHN PAZMINO
 EDITOR. FRED STERN
 LIBR. TOM SKAPINSKI
 ++++++

PLEASE SEND INQUIRIES TO:
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 LISTING
 MR. FREDERIC STERN
 P.O. BOX 264
 HOLBROOK, N.Y. 11741
 ++++++

NYTSE
 ++++++
 NYTSE MEETS THE THIRD MONDAY IN
 THE MONTH AT:
 MISS KIMS RESTAURANT
 PARK AVENUE SOUTH
 BETWEEN 21 ST. AND 22 ST.
 MEETINGS START 7:30 PM.

++++++

COMING EVENTS:

 MAY 16, 1993 LIST MEETING.
 MAY 17, 1993 NYTSE MEETING

 SPECIAL NOTICE

THE NEXT MEETING WILL BE HELD AT
 THE ICE CREAM DISPENSARY
 (HARVEY'S STORE)
 334 DOGWOOD AVENUE
 FRANKLIN SQUARE, N.Y.
 TEL: 516-486-1090

DIRECTIONS: SOUTHERN STATE PKWY
 TO EXIT 17 NORTH (HEMPSTEAD AVE)
 GO TO FIRST TRAFFIC LIGHT,
 LEFT TURN ON TO CORNWALL,
 NEXT TRAFFIC LIGHT, BEAR RIGHT
 ON TO DOGWOOD AVENUE. GO 1 MILE
 TO THE ICE CREAM DISPENSARY. IN
 A SMALL SHOPPING CENTER ON THE
 LEFT SIDE OF THE ROAD.

MEETING MINUTES

 REPORTED BY: FRED STERN
 APR. 18, 1993

 HARVEY CALLED THE MEETING TO
 ORDER AT 2:30PM.

WE RECEIVED 1 RENEWAL AND 2 NEW
 MEMBERSHIPS TO LIST. WE ALSO
 RECEIVED LETTERS REQUESTING IN-
 FORMATION.

IN JUNE WE WILL HAVE OUR SWAP
 MEET. GET YOUR EQUIPMENT TO-
 GETHER, AND CHECK THE NEXT ISSUE
 OF LISTING FOR MORE DETAILS.

BOB GILDER WAS NOMINATED AND
 VOTED IN AS OUR NEW VICE
 PRESIDENT. (CONGRATULATIONS
 BOB).

IF YOU WANT TO GIVE OR GET IN-
 FORMATION, TO OR FROM LIST,
 PLEASE CONTACT HARVEY 11:00AM-
 6:00PM AT 516-486-1090. (THE ICE
 CREAM DISPENSARY).

IF YOU ARE INTERESTED IN GOING
 TO THE QL EXPO IN NEWPORT R.I.,
 ON JUNE 5, 1993, CALL HARVEY
 (SEE ABOVE) ABOUT CAR POOL IN-
 FORMATION.

BOB GILDER REPEATED HIS DEMON-
 STRATION OF THE EXTRICATOR ZX81
 EMULATOR PROGRAM FOR THE QL.
 A DEMONSTRATION OF A SECOND
 EMULATOR PROGRAM DID NOT HAPPEN
 DO TO TECHNICAL DIFFICULTIES.

AFTER THE DEMONSTRATION, BOB HELD
 AN EVALUATION SEMINAR FOR MEM-
 BERS WHO BROUGHT TO THE MEETING
 QL COMPUTERS THAT WERE NOT WORK-
 ING.

CLASSIFIEDS

 THIS CLASSIFIED SECTION IS
 AVAILABLE TO ALL LIST MEMBERS
 FREE OF CHARGE.
 THE ONLY RESTRICTION IS THAT
 IT IS TO BE USED ONLY FOR THE
 SEEKING, SELLING OR SWAPPING
 OF SINCLAIR, TIMEX OR MICROACE
 COMPUTER EQUIPMENT, PERIPHERALS
 AND SOFTWARE.
 LISTING, LIST, AND ITS OFFICERS
 DO NOT ENDORSE, WARRANTY, OR
 GUARANTEE ANY OF THE ITEMS
 LISTED IN THIS CLASSIFIED
 SECTION

THE FOLLOWING PUBLICATIONS ARE
 AVAILABLE ONLY THROUGH LIST:

ZX-81/TS1000 TECHNICAL TIDBITS
 TECHNICAL TIDBITS PART II
 SAVINGS AND LOAD OF THE TIMEX
 COMPUTER
 \$4.00 EACH.

JUNE LIST MEETING IS OUR ANNUAL
 SWAP MEET, DO NOT FORGET...

MAX (A NEW MEMBER) HAS A TANDY
 640K COMPUTER WITH COLOR MONITOR
 ALL BOOKS. NEVER USED, \$295.00
 CALL MAX AT 516-486-4236.

A FINAL WORD

 MY NAME IS FRED STERN AND I AM
 THE EDITOR OF THIS EDITION OF
 LISTING.

THIS MONTH I DECIDED TO DEVOTE
 THE NEWSLETTER TO PROGRAMS.
 THESE PROGRAMS ARE FROM VARIOUS
 TIMEX MAGAZINES. HAVE FUN AND
 ENJOY.

SPECIAL THANKS TO TOM SKAPINSKI
 AND BOB GILDER FOR THEIR HELP
 AND ASSISTANCE,

START PLANNING NOW FOR THE LIST
 TIMEX SWAP MEET.

SEE YOU ALL AT THE NEXT MEETING.

QL CORNER

I would like to discuss an additional operation for printing documentation from within Quill. I have recently received requests from some of our corresponding LIST members; "How print large documents, say 10 pages or more, back-to-back".

What I mean by 'back-to-back' is that page two is printed on the back of page 1; page four is printed on the back of page three, and so on....

Before you start printing document pages singly, make a list of the pages; both odd pages and even pages and as you start to print each individual page cross out that page number on your list so that you will not become confused when it is time to print the next page.

ODD	EVEN
1	2
3	4
5	6
7	8

and so on.....

When you're ready to print out your document, press F3, P, ENTER. The command line will state Print, current,- press ENTER. The command line will state Print, current, whole, - press 1, ENTER. The command line will state Print, current, 1 to end,- press 1 again and then press ENTER. The command line will state Print, current, 1 to 1, to printer,. To print out the page to your printer, press ENTER and the page will be printed. The next page to be printed should be page 3. Just repeat the above sequence by entering 3 instead of 1, and so on...

Remember to print out ALL odd pages, in their normal sequence as the above table illustrates; then remove the printed pages from your printer and turn the printed paper over and reinsert the paper into your printer. Note that the printed matter on the printer paper NOW faces up. Make sure that you installed the printer paper with the top of page 1 first and ensure that the top of the page is in the proper alignment so that the document header and/or footer will be in the approximate place as is the page 1 side.

This sounds like a lot of work.. it really isn't. Your documents will now be professional looking and as an added benefit, you have only used half the amount of printer paper that you would normally use.

Since the beginning of the year, the German QL market seems to have exploded! Both suppliers have wide variety of new hardware and software for sale. Hard disk drives interfaces for an assortment of small to large capacity hard drives, a QL computer TOWER case, and so much more.

It is my understanding that Mechanical Affinity will also be handling one of the German suppliers software and hardware, contact:

MECHANICAL AFFINITY
c/o Frank Davis
513 East Main Street
Peru Indiana 46970
Tel: 317-473-8031

MECHANICAL AFFINITY
c/o Paaul Holmgren
5231 Wilton Wood Court
Indianapolis, Indiana 46254
tel: 317-291-6002

See you next month.... Bob Gilder

```

100 REM Utility Draw
110 REM © 1982 P Safranek
120 GO SUB 340: CLS : LET x=0:
LET y=0
130 LET a$=INKEY$
140 IF a$<>"o" AND a$<>"d" AND
a$<>"s" AND a$<>"r" AND a$<>"c"
THEN GO TO 210
150 IF a$="o" THEN GO SUB 390
160 IF a$="d" THEN GO SUB 430
170 IF a$="s" THEN GO SUB 520
180 IF a$="r" THEN GO SUB 410
190 IF a$="c" THEN GO SUB 490
210 LET x=x+(a$="j")-(a$="q")
220 LET y=y+(a$="y")-(a$="u")
230 LET x=x+(a$="u")-(a$="j")
240 LET y=y+(a$="j")-(a$="y")
250 LET x=x+(a$="b")-(a$="n")
260 LET y=y+(a$="n")-(a$="b")
270 IF x<0 THEN LET x=0
280 IF x>255 THEN LET x=255
290 IF y<0 THEN LET y=0
300 IF y>175 THEN LET y=175
310 PLOT x,y: PLOT OVER 1;x,y
320 PLOT x,y: PLOT OVER 0;x,y
330 GO TO 130
340 INPUT "ink [0-7]?";i:"pap
er [0-7]?";p:"border [0-7]?";b
350 IF i<0 OR i>7 THEN GO TO 34
360 IF p<0 OR p>7 THEN GO TO 34
370 IF b<0 OR b>7 THEN GO TO 34
380 BORDER b: PAPER p: INK i
390 INPUT "over [0 or 1]?";o: IF
o<>1 AND o<>0 THEN GO TO 390
400 RETURN
410 INPUT "x?";x:"y?";y
420 RETURN
430 INPUT "x coord";a
440 INPUT "y coord";b
450 INPUT "draw x?";c
460 INPUT "draw y?";d
470 PLOT a,b: DRAW c,d
480 RETURN
490 INPUT "x?";xx:"y?";yy:"r?";
r
500 CIRCLE xx,yy,r
510 RETURN
520 INPUT "Name?"; LINE f$
530 SAVE f$:SCREEN$
540 RETURN
550 SAVE "ut.draw" LINE 100

```

```

*****
LIST
*****
LIST
*****
LIST
*****
LIST
*****

```



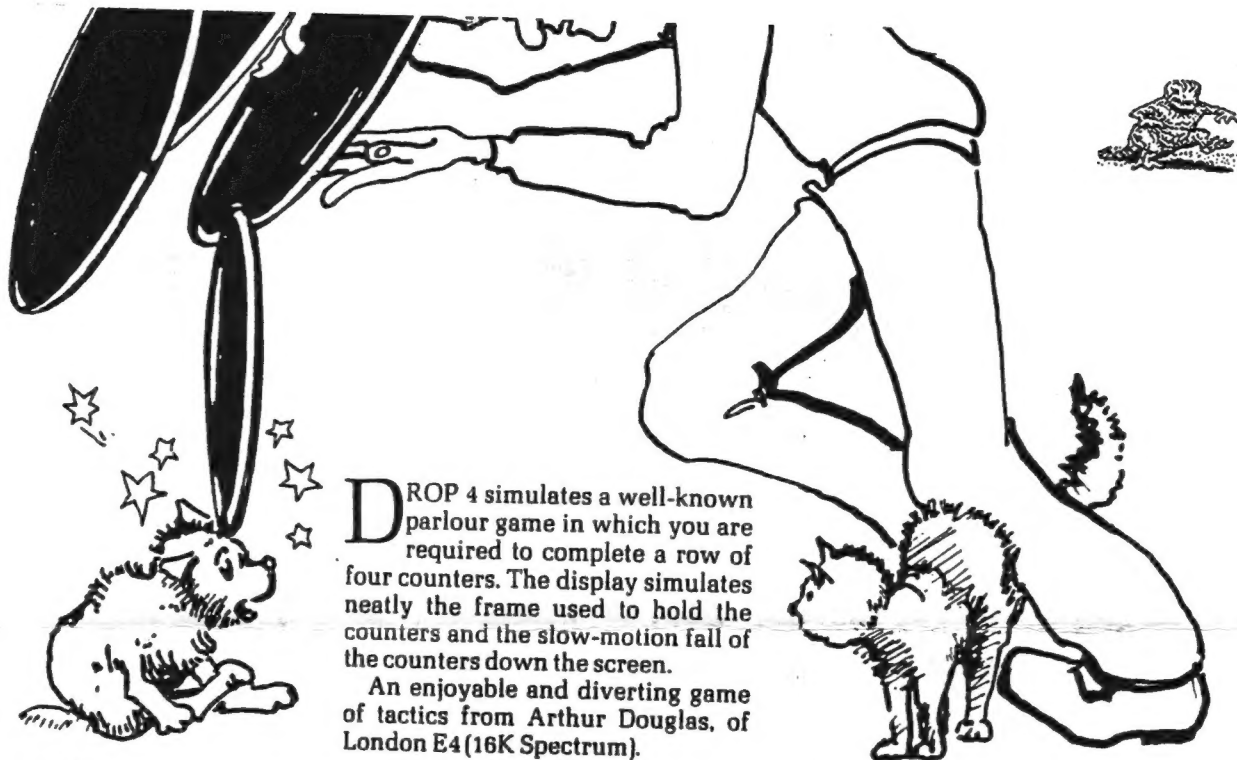
UTILITY DRAW



PETER SAFRANEK of Ashford, Middlesex, has sent a very useful graphics program for the 16K or 48K Spectrum. Commands available are "o" to input the over; "d" to draw for inputted x and y and draw x and draw y; "c" to draw a circle around inputted x and y coordinates and inputted radius; "s" to save the design on the screen as a SCREENS; and "r" to re-set the flashing pixel cursor to inputted x and y co-ordinates.

The pixel cursor is moved in any one of eight directions using the eight letters around "H" on the keyboard—i.e., T, Y, U, G, J, B, N and M. Once you have entered the program you can SAVE it by entering "RUN 550".

Practice and patience can produce displays like the map of Europe shown; an outline on the screen in washable ink was a help for this, Safranek reports. The advantage of such a saveable display for educational purposes is obvious (16 or 48K)



DROP 4 simulates a well-known parlour game in which you are required to complete a row of four counters. The display simulates neatly the frame used to hold the counters and the slow-motion fall of the counters down the screen.

An enjoyable and diverting game of tactics from Arthur Douglas, of London E4 (16K Spectrum).

DROP 4

```

100 LET X=1: LET I$="XXX": INK
0: PAPER 7: CLS: DIM A(12,13)
110 LET S$=CHR$ 144+CHR$ 145+CHR$ 146
120 LET T$=CHR$ 147+CHR$ 95+CHR$ 148
130 LET U$=""
140 DATA 0,127,127,127,127,127,
127,127
150 DATA 0,255,255,255,255,255,
255,255
160 DATA 0,254,254,254,254,254,
254,254
170 DATA 128,128,128,128,128,128,128,128
180 DATA 1,1,1,1,1,1,1,1,255
190 FOR J=144 TO 148: FOR K=0 TO 7
200 READ A: POKE USR CHR$ J+K,A
210 NEXT K: NEXT J
220 FOR J=2 TO 17 STEP 3
230 FOR K=2 TO 26 STEP 4
240 PRINT INK 6; PAPER 0; AT J,K
;S$
250 PRINT PAPER 6; AT J+1,K;T$
260 NEXT K: NEXT J
270 PRINT INK 3; AT 0,3;"1 2
4 5 6 7"
280 PRINT INK 7; PAPER X; AT 20,
11;"PLAYER ";X
290 INPUT "WHICH COLUMN I 1 TO
7 ";A
300 IF A<>INT A OR A>7 OR A<=0
THEN GO TO 290
310 LET C=(A-1)*4+2
320 IF ATTR (2,C)<>6 THEN PRINT
FLASH 1; AT 21,7;"COLUMN ";A;" I
S FULL": GO TO 290
330 PRINT AT 21,7;U$
340 FOR J=0 TO 18
350 LET Z=ATTR (J,C)
360 PRINT AT J,C; PAPER X; INK
7;I$
370 IF J=2 THEN PRINT INK 3; AT
J-2,C;CHR$ 32;A;CHR$ 32
380 IF J>2 AND Z=6 THEN PRINT P

```

```

APER 6; AT J-2,C;T$
390 IF J>2 AND Z=48 THEN PRINT
AT J-2,C;"
400 IF J>2 AND Z=56 THEN PRINT
INK 6; PAPER 8; AT J-2,C;S$
410 IF J=18 OR ATTR (J+2,C)=23
OR ATTR (J+2,C)=15 THEN BEEP 0.1
;-20: GO TO 148
420 IF Z=48 THEN FOR P=1 TO 4:
BEEP 0.05,(20-2*J)+P: NEXT P
430 NEXT J
440 LET L=J/3+3: LET C=A+3
450 LET A(L,C)=X
460 FOR J=-3 TO 0
470 IF A(L+J,C)=X AND A(L+J+1,C)
=X AND A(L+J+2,C)=X AND A(L+J+3
,C)=X THEN GO TO 550
480 IF A(L,C+J)=X AND A(L,C+J+1
)=X AND A(L,C+J+2)=X AND A(L,C+J
+3)=X THEN GO TO 550
490 IF A(L+J,C+J)=X AND A(L+J+1
,C+J+1)=X AND A(L+J+2,C+J+2)=X A
ND A(L+J+3,C+J+3)=X THEN GO TO 5
50
500 IF A(L-J,C+J)=X AND A(L-J-1
,C+J+1)=X AND A(L-J-2,C+J+2)=
=X AND A(L-J-3,C+J+3)=X THEN G
O TO 550
510 NEXT J
520 LET I$="000": IF X=2 THEN L
ET I$="XXX"
530 LET X=X+1: IF X=3 THEN LET
X=1
540 GO TO 280
550 PRINT OVER 1; FLASH 1; AT 20
,11;U$; ( TO 8)
560 PRINT AT 20,9; FLASH 1; INK
X;"PLAYER ";(X); "UINS"
570 INPUT "ANOTHER GAME ";A$: I
F A$(1)<>"Y" THEN STOP
580 PRINT AT 20,9;"
": GO TO 220
590 PRINT AT 21,0;U$; AT 21,16;U
$
600 DIM A(12,13): GO TO 220
9999 SAVE "drop four"

```

```

10 INPUT A$
20 FOR L=SGN PI TO LEN A$
30 LET X=VAL "7681"+CODE A$(L)
*CODE "3"
40 FOR Y=NOT PI TO CODE "J"
50 LET P=PEEK (X+Y)
60 FOR G=7 TO 8 STEP -1
70 IF P<2*G THEN GOTO 100
80 PLOT 8-L-G,8-Y
90 LET P=P-2*G
100 NEXT G
110 PAUSE CODE ";;"
120 NEXT Y
130 NEXT L
140 SCROLL
150 SCROLL
160 SCROLL
165 SCROLL
170 GOTO SGN PI

```

$LY=0$
 $=0$
 OF OUTER RING
 TO 10
 OF WHEEL?"; R1
 OF WHEEL?";
 S
 $LY=87+R-D$

SPIRO- GRAPH

SINCE WE loaded **Bio-rhythms** we have not been able to see the TV screen for interested parties. Everyone in the office is becoming a bio-rhythm bore.

The program requires your date of birth and the current date and then displays a neat chart of the month, with curves for the physical, mental and emotional cycles.

Your physical state varies over a 23-day cycle and relates to your endurance, strength and aggressiveness. The emotional cycle lasts 28 days and governs anger, moodiness and optimism/pessimism. Mentally, you oscillate between Einstein and ape over a 33-day cycle.

The program was submitted by R Clark, of Saltash, Cornwall.

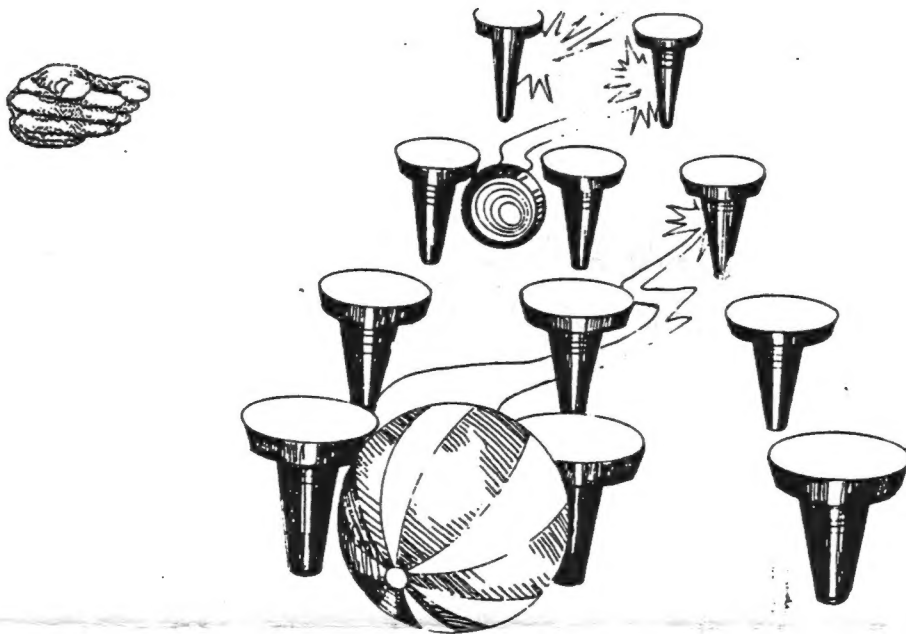
```

1 RESTORE
2 PRINT AT 0,0;"          BIO-R
HYTHM
10 INPUT "Enter Date of Birth"
;"Day ";a;" Month ";b;" Year
";c
20 INPUT "Enter Date Now ";d;"M
onth ";d;" Year ";e
25 CLS
30 LET t=INT (((e-c)*365.25)+(
(d-b)*30.35)-a)
800 FOR r=0 TO 255
810 PLOT r,10
815 IF r=INT (r/8)*8 THEN FOR u
=10 TO 20: PLOT r,u: NEXT u
820 NEXT r
830 PRINT AT 21,0;"1st      10th
      20th      30th"
840 PRINT AT 0,0: INK 1;"physic
al "; INK 2;"mental "; INK 4;"
emotional"
900 FOR r=1 TO 3
905 READ u
910 LET l=2*PI*(t-(INT (t/u)*u)
)/u
920 LET k=2*PI*(33-u)*.03
1000 FOR a=l TO k+l+(2*PI) STEP
.1
1010 PLOT INK ((1 AND u=33)+(2 AND
u=28)+(4 AND u=33));(a-l)*(35
-28+u).90+5IN a*60
1020 NEXT a
1030 NEXT r
1040 DATA 23,28,33
1050 INPUT "Another Go ? ";a$: I
F a$(1)="y" THEN GO TO 1

```

BIO- RHYTHMS





BINOMIAL DISTRIBUTION

BINOMIAL DISTRIBUTION might be the first of a new style of program. It was submitted by P R Scott, of Goldalming, Surrey, who believes that there are many fundamental scientific principles which could profitably be illustrated on Sinclair machines.

This program for the 16K ZX-81 serves to illustrate the principle of

binomial distribution. The display shows a ball falling through a triangular matrix of pegs. When the ball hits one of the pegs it rebounds to the left or right, entirely at random.

Its final position is recorded and a further ball produced. The distribution of final positions is the binomial distribution, familiar to most O level mathematics candidates. You may

not know that this characteristic pattern is also of importance in spectral intensities and polymer conformations.

An excellent program, likely to prove of immediate use to teachers and students of mathematics. Graphics notes:

120—Minus, Four spaces, minus and soon.

```

10 DIM A(7)
20 FOR X=1 TO 7
30 LET A(X)=0
40 NEXT X
50 PRINT AT 0.5;"BINOMIAL DIST
RIBUTION"
60 PRINT AT 5.15;" "
70 PRINT AT 3.14;" "
80 PRINT AT 2.13;" "
90 PRINT AT 1.12;" "
100 PRINT AT 13.11;" "
110 PRINT AT 15.10;" "
120 PRINT AT 17.9;" "
130 PRINT AT 18.11;" "
200 PRINT AT 3.15;" "
210 LET X=15
220 LET Y=3
230 LET XP=X
240 GOSUB 400

```

```

250 IF Y=15 THEN GOTO 490
260 LET A=AND
270 IF A=0.5 THEN LET X=X+1
280 IF A=0.5 THEN LET X=X-1
290 GOSUB 400
300 GOTO 230
400 PRINT AT Y,XP;" "
410 LET Y=Y+1
420 PRINT AT Y,X;" "
430 RETURN
490 PRINT AT 16,X;" "
500 LET Z=(X-7)/2
510 LET A(Z)=A(Z)+1
520 LET P=17
530 IF Z/2=INT(Z/2) THEN LET P
=18
540 LET Q=X
550 IF A(Z)>=10 THEN LET Q=Q-1
560 PRINT AT P,Q;A(Z)
570 IF A(Z)=50 THEN INPUT Z$
580 GOTO 200

```


LINEAR REGRESSION -
 LINEAR REGRESSION -
 LINEAR REGRESSION -
 LINEAR REGRESSION -
 LINEAR REGRESSION -
 LINEAR REGRESSION -
 LINEAR REGRESSION -



```

1 REM "LR"
10 LET A=0
20 LET B=0
30 LET C=0
40 LET D=0
50 LET E=0
60 LET H=0
90 PRINT "HOW MANY PAIRS OF NUMBERS?"
100 INPUT N
105 CLS
110 PRINT "INPUT X THEN Y."
120 INPUT X
130 INPUT Y
135 CLS
140 LET A=A+X
150 LET B=B+Y
160 LET C=C+X*X
170 LET D=D+Y*Y
180 LET E=E+X*Y
190 LET F=A/N
200 LET G=B/N
210 LET H=H+1
220 IF H<N THEN GOTO 110
270 LET I=(N*E-A*B)/(N*C-A*A)
280 LET J=G-I*F
290 PRINT "Y=";J;"+";I;"X"
300 LET K=(N*E-A*B)/(N*D-B*B)
310 LET L=F-K*G
320 PRINT "X=";L;"+";K;"Y"
330 LET P=SQR (D/(N-1)-(B*B/(N*(N-1))))
340 LET Q=SQR (C/(N-1)-(A*A/(N*(N-1))))
350 PRINT "X SIGMA(N-1) = ";Q
360 PRINT "Y SIGMA(N-1) = ";P
370 LET G=SQR (((1/N)*C)-F*F)
380 LET R=SQR (((1/N)*D)-G*G)
390 PRINT "X SIGMA(N) = ";Q
400 PRINT "Y SIGMA(N) = ";P
410 LET S=((1/N)*E-(F*G))/(Q*R)
420 PRINT "CORRELATION COEFFICIENT(R) = "
430 PRINT "R=";S
440 PRINT "STANDARD ERROR OF ESTIMATE"
450 PRINT "S(Y) = ";R*SQR (1-S*S)
460 PRINT "S(X) = ";G*SQR (1-S*S)

```



IF YOU are struggling with mathematics homework, **Linear regression** calculates those tricky problems using the ZX-81. It relates both x to y and y to x, as well as giving the probable errors involved.

From Martyn Whitwood, of Rotherham, South Yorkshire.

DOODLE



```

10 LET A=30
20 LET B=20
30 LET C=1
40 PLOT A,B
50 IF C=2 THEN UNPLOT A,B
60 LET U$=INKEY$
70 LET A=A+(U$="8" OR U$="L"
OR U$="O") AND A<53)-(U$="5" OR
U$="I" OR U$="K") AND A>10)
80 LET B=B+(U$="7" OR U$="I"
OR U$="O") AND B<35)-(U$="6" OR
U$="K" OR U$="L") AND B>8)
85 IF U$="Z" THEN COPY
90 IF U$="Q" THEN LET C=1
100 IF U$="U" THEN LET C=2
110 IF U$="Ø" THEN CLS
120 UNPLOT A,B
130 GOTO 40
    
```



DOODLE is one of the most useful programs we have received for the ZX-81 tinkerer.

It provides a way of drawing in eight directions under cursor control. Keys 5 to 8 give the usual four points of the compass, while I, O, K and L give the points between.

Key W gives UNPLOT and you can return to PLOT with Q. If you have a printer you can input Z for an instant COPY; if not, omit line 85. Key Ø clears the screen.

As listed, the routine is set up for the 1K machine and will let you draw only over a part of the screen. If a RAM pack is used you can work on the whole screen by changing the listing as follows:

In line 70, where "A is less than 53" and "A is greater than 10", change to "A is less than 63" and "A is greater than 0 respectively. In line 80, "B is less than 35" and "B is greater than 8" become "B is less than 43" and "B is greater than 0".

Thanks to Peter Wylie, of Christchurch, Dorset, for this very worthwhile routine.